

Deliverable D.12.1 Integrating science-based and value-based trade-off analysis methods is now available. The aim of WP12 is to develop a spatial evaluation tool for the trade-off analysis of various land use options (qualitative exploration), integrating environmental and socio-economic indicators of sustainability, to assess whether the multifunctional land use system is sustainable. The concept of trade-off analysis is connoted in a diverse manner in VOLANTE. We can at least differentiate three different approaches that have to be coupled in the final outcomes of the project: (i) science-based trade-offs analysis relies on ecosystem service indicator and perform statistical analyses on their appearance, bundling, and synergies/trade-offs; (ii) value-based trade-off analysis operate in the field of decision sciences and integrates the component of interests and preferences into indicator-based assessments, (iii) and trade-offs as applied in the Visions workshops add the informative and explanatory character to the overall trade-off concept. In D12.1 we are focusing on the integration of the first two approaches. It is an important feature within the VOLANTE project to apply and test a bandwidth of trade-off analysis methods to comply with the complexity of land-use questions and to find novel, interdisciplinary angles of analysis. D12.1 aims at identifying (1) modes of application in the trade-off analysis sequence, (2) trade-off outputs for potential use in the Roadmap, (3) data issues, (4) scale issues, and (5) harmonized means of interpretation of results.

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